

ECS Configuration Change Request

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1. Originator Gary Lake	2. Log Date: 3-29-00	3. CCR #: 00-0345	4. Rev: -	5. Tel: 301-614-5751	6. Rm #: N126-6	7. Dept. Sys Eng
8. CCR Title: DUE to collect DPR Statistics Data						
9. Originator Signature/Date			10. Class II	11. Type: CCR	12. Need Date: April 7, 2000	
13. Office Manager Signature/Date <i>[Signature]</i> 3-28-00			14. Category of Change: Initial ECS Baseline Doc		15. Priority: (If "Emergency" fill in Block 28). Routine	
16. Documentation/Drawings Impacted: Planning and Data Processing Database Design 311-CD-503-001 Release 5A			17. Schedule Impact:		18. CI(s) Affected: PLANG	
19. Release Affected by this Change: 5A		20. Date due to Customer:		21. Estimated Cost: None - Under 100K		
22. Source Reference: <input type="checkbox"/> NCR (attach) <input type="checkbox"/> Action Item <input type="checkbox"/> Tech Ref. <input type="checkbox"/> GSFC <input type="checkbox"/> Other:						
23. Problem: (use additional Sheets if necessary) We do not store the information required to enable trend analysis of DPR Completions.						
24. Proposed Solution: (use additional sheets if necessary) One new table will be added to the pdps database to store data on the total number of DPRs completed during one hour time periods, and the totals for the corresponding CPU usage parameters. The new table is expected to receive about 3MB of data per year. A stored procedure will be written in Sybase's Transact SQL to select sums of values from the PIDprCompletion table in the pdps database from one hour prior to the present to the present. The results of this query will be stored in a new pdps database table with corresponding sample period information. This operation will be repeated once every hour by cron.						
25. Alternate Solution: (use additional sheets if necessary) A similar solution can be implemented to that which is proposed, however, instead of storing the data in a table in the pdps database, the data may be stored in a newly created database. The advantage to this approach is in the complete separation of the new code from existing code. The disadvantage is that the newly created database must reside on n0nls02_svr otherwise n0nls02_svr and						
26. Consequences if Change(s) are not approved: (use additional sheets if necessary) It will not be possible to create a user interface that displays DPR data to the production planners who would use this information in scheduling.						
27. Justification for Emergency (If Block 15 is "Emergency"): DUE into only. No perceived ECS Impacts						
28. Site(s) Affected: <input type="checkbox"/> EDF <input type="checkbox"/> PVC <input type="checkbox"/> VATC <input type="checkbox"/> EDC <input checked="" type="checkbox"/> GSFC <input type="checkbox"/> LaRC <input type="checkbox"/> NSIDC <input type="checkbox"/> SMC <input type="checkbox"/> AK <input type="checkbox"/> JPL <input type="checkbox"/> EOC <input type="checkbox"/> IDG Test Cell <input type="checkbox"/> Other						
29. Board Comments:			30. Work Assigned To:		31. CCR Closed Date:	
32. EDF/SCDV CCB Chair (Sign/Date):			Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS			
33. M&O CCB Chair (Sign/Date): <i>W.B. [Signature]</i> 25 Apr 00			Disposition: <u>Approved</u> App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS			
34. ECS CCB Chair (Sign/Date):			Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ESDIS			

CM01JA00

ECS/EDF/SCDV/M&O

ORIGINAL

ADDITIONAL SHEET

CCR #: **Rev:** **Originator:** Gary Lake

Telephone: 301-614-5751 **Office:** N126-6

Title of Change: DUE to collect DPR Statistics Data

Proposed solution (cont.) The procedure to be executed will be contained in a file that is listed as a new entry in the crontab with the appropriate specifications for the execution times.

The following SQL code may be used to create the required table in the pdps database, and to store data on a periodic basis. The 3MB per year sizing estimate is based on a sampling rate of 1 execution per hour of the stored procedure that contains the record insert commands. If the number of PGE's doubles, then the number of MB per year will double.

Component Description

PIDprMetrics

```
create table PIDprMetrics (pgeName varchar(17) not null,  
HourlySumPgeCpuTime float null,  
HourlySumSystemCpuTime float null,  
HourlySumPgeElapsedTime float null,  
dprIdCount int null,  
SampleStartTime datetime not null,  
SampleEndTime datetime not null,  
primary key (SampleStartTime, pgeName))
```

GetDPRStatistics

```
# BE SURE THAT EXEC PRIVILEGES HAVE BEEN PROPERLY  
# GRANTED TO $DBUSERNAME FOR PROCEDURE GetLatestDPRStatistics  
DBUSERNAME=<user name>  
DBPASSWD= <password>
```

```
SYBASE= <file path>/sybase  
DSQUERY= g0pls01_srvr  
$SYBASE/bin/isql -U$DBUSERNAME -P$DBPASSWD  
go  
exec GetLatestDPRStatistics  
go  
EOF
```

3.4.3 GetLatestDPRStatistics

Create Proc GetLatestDPRStatistics

as

insert PIDprMetrics

```
select "DPREP",sum(pgeCpuTime),sum(systemCpuTime),  
sum(pgeElapsedTime),count(distinct dprId), dateadd(hh, -1,getdate()), getdate()  
from PIDprCompletion  
where dprId like '%Att%' or dprId like '%Eph%'  
and completionDate > dateadd(hh, -1,getdate())  
and completionDate < getdate()
```

insert PIDprMetrics

```
select "PGE01",sum(pgeCpuTime),sum(systemCpuTime), sum(pgeElapsedTime),count(distinct dprId), dateadd(hh, -1,getdate()),  
getdate()  
from PIDprCompletion  
where dprId like '%PGE01%'  
and completionDate > dateadd(hh, -1,getdate())  
and completionDate < getdate()
```